994-107

PSP Cover Sheet (Attach to the front of each proposal) Battle Creek Restoration Program -- Limitations of Catastrophic Risk to Private Aquaculture Trout Producer and Regional Economy Proposal Title: from Introduced Pathogens due to Increased Incidence of Anadromous Salmonid Applicant Name: Mt. Lassen Trout Farms, Inc. Mailing Address: 28125 Hwy 36E, Red Bluff, CA. 96080 Telephone: (530) 597-2222 Fax: (530) 597-2068 Email: dbrown@shasta.com Amount of funding requested: \$ 4,136,297 for 3 years Indicate the Topic for which you are applying (check only one box). Fish Passage/Fish Screens Introduced Species M. Habitat Restoration Fish Management/Hatchery ■ Local Watershed Stewardship Environmental Education Water Quality Does the proposal address a specified Focused Action? X yes no What county or counties is the project located in? __Tehama / Shasta_ Indicate the geographic area of your proposal (check only one box): Sacramento River Mainstein East Side Trib: ____ Sacramento Trib: Battle Creek Suisun Marsh and Bay □ San Joaquin River Mainstein North Bay/South Bay: ☐ San Joaquin Trib: ☐ Landscape (entire Bay-Delta watershed) D Delta: □ Other: Indicate the primary species which the proposal addresses (check all that apply): San Joaquin and East-side Delta tributaries fall-run chinook salmon Winter-run chinook salmon Spring-run chinook salmon ■ Late-fall run chinnok salmon Fall-run chinook salmon □ Delta smelt Longfin smelt □ Splittail Steelhead trout ☐ Green sturgeon Striped bass Migratory birds I All chinook species Other: All anadromous saimonids Specify the ERP strategic objective and target (s) that the project addresses. Include page numbers from January 1999 version of ERP Volume I and II: to mobilize flows for fish passage. Target 1 for Battle Creek is 25-50 cfs increase

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(page 213); ERP to improve fish habitat, Target for all streams (page 216); ERP to stressors. Target 1 for Battle Creek to remove conflicting diversions (page 216) -- all

within principles of protecting regions and their economies.

Indi to to to to	icate the type of applicant (check only one State agency Public/Non-profit joint venture Local government/district University	box):	Federal agency Non-profit Private party Other:
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	ilip Mackey, President, Mt. Lasse ted name of applicant	n Tro	out Farms, Inc.

Title Page

Battle Creek Salmon and Steelhead Restoration Program

Limitations of Catastrophic Risk to Private Aquaculture Trout Producer and Regional Economy from Introduced Pathogens due to Increased Incidence of Anadromous Salmonids

Submitted by:

Mt. Lassen Trout Farm Dan Brown 28125 Highway 36E Red Bluff, CA 96080

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Subcontractors:

Environmental Impact Assessment: Natural Resources Scientists, Inc. Facilities engineering and contract management: Judson Engineers, Inc. Facilities installation and construction: to be determined by competitive bid

Mt. Lassen Trout Farm is a private company Tax identification number: 94276-2921

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Executive Summary

The CALFED Battle Creek Salmon and Steelhead Restoration Program (BCRP) has the overall objective of fortifying runs of all four races of chinook salmon in Battle Creek. An additional objective is to enlarge the steelhead population, which, together with the winter-run salmon, would be greatly aided by the basin's enhanced water conditions.

In the early 1900s, hydro development and irrigation diversions were constructed creating barriers that limited the number of anadromous fish reaching spawning areas in the middle reaches. Other facilities upstream added in the last seventy-five years further reduced access to the uppermost reaches.

The primary remedial actions are to increase access to the middle and upper reaches by removing some barriers and constructing improved fish ladders at the remaining sites. The first step will be taken this year with modifications to the barrier dam at Coleman National Fish Hatchery in the lower reach.

One consequence of expanding access for anadromous salmonids in Battle Creek is a large increase of serious pathogens carried by these fish. The Coleman hatchery has been plagued by these pathogens for years and, after many attempts to reduce their substantial fish losses, installed an ozone treatment unit to kill pathogens in the water supply. USFWS recognizes the risks from BCRP and will be expanding its treatment of the Coleman water supply using BCRP funds.

The vast increase in the number of carriers of serious fish pathogens into the relatively pathogen-free water of the upper reaches presents a high risk for a catastrophic impact at Mt. Lassen Trout Farms' (MLTF) eight trout hatcheries located within the watershed. The introduction of pathogens in these facilities could also force closure of MLTF's facilities in Paynes Creek and in Burney.

MLTF formally raised their concern with the responsible agencies on five different occasions beginning in 1996. Early in BCRP planning, CDFG officials confirmed that an increased level of pathogen risk to MLTF would be created by BCRP. The Battle Creek Community Strategy pressed the critical economic need for the community to maintain enterprises such as MLTF. Yet, the BCRP does not provide for any remedial actions to protect and sustain MLTF, even though it funds PG&E modifications and compensates PG&E for future revenue losses.

The seriousness of introducing these pathogens in an aquaculture operation is reflected in the provisions of Federal and State laws. These stipulate pathogenic organism intolerance will govern intra and inter-state transport and sale of cultured salmonids. The option of pathogen management is not even allowed. Hence, any incidence of these pathogens at MLTF facilities will require destruction of all MLTF fish and disinfection of the installations. Not only would the cost of one event be devastating, the situation could easily recur unless positive preventive measures are instituted. Indeed, MLTF would fail since it would be out of production for several years, losing its customers to other suppliers. The history of Coleman hatchery on Battle Creek confirms the cause and nature of the risk.

MLTF, established in 1949, is the largest private salmonid aquaculture firm in California, producing eggs and adult trout. Eggs are sold throughout the world: 30 million last year, while adults are sold live to recreational fish operations and selected fish shops throughout the state. Marketing 1.4 million pounds of fish annually, the Burney facility is MLTF's largest growout installation. Broodstock are held at two Battle Creek facilities certified pathogen-free by USDA. The pathogen free condition of the MLTF sites, some of the few in California including the CDFG facilities, is entirely due to their isolation from wild

salmonids and isolated artesian water supplies. MLTF is a major contributor to the local economy with an annual gross of about \$3.4 million. With a multiplier of 2.7 as used by CALFED, the MLTF enterprise has an impact upon the economy of \$9.2 million. MLTF employs a staff of 24.

In addition to avoiding introducing pathogens into the local basin waters, MLTF configured the primary production facility at Burney to avoid negative environmental impacts. Water utilized in the production facility is a supply owned by a local rancher for irrigating his lands. After the water passes through a small hydro plant which captures the water at its source, MLTF diverts it through its production facility and then into the rancher's irrigation system. Thus, the water is utilized twice by essentially non-consumptive uses and then passes on to irrigate crops. All fish wastes are transported in the discharge water and applied as fertilizers during irrigation, reducing the rancher's use of chemical fertilizer. Most other sites discharge into wetlands for nutrient removal and all subsequently into irrigation or hydro canals.

CALFED adopted wise principles to govern restoration actions: (a) Be equitable: focus on solving problems in all areas, (b) Be affordable: solutions will be within the resources of the Program and stakeholders and (c) Have no significant redirected negative impacts. Further, CDFG Code Sec. 15100 (b) mandates CDFG to protect aquaculture from sources of pathogens. Thus, CALFED should fund measures to avoid the risks to MLTF associated with the increased pathogens created by BCRP and financial protection against any risk that may remain as indirectly provided to government facilities under BCRP. Of equal importance, it should do so to help sustain MLTF's major contribution to the region's economy.

MLTF has defined the problem created by BCRP actions and devised a program of actions. The Project will: (a) assure reliable water quality at each facility; (b) construct predator-proofing features at vulnerable sites; (c) modify raceways at most facilities; and (d) secure insurance to mitigate any remaining unforeseen risks. Legislation providing equivalent protection will be sought in lieu of insurance. The Project will consider alternative approaches to protect MLTF water supply quality at some sites. One approach parallels the treatment to be funded by CALFED at Coleman hatchery. The other entails modifications to the collection of source water at some facilities and adjustment to site wetlands.

MLTF will secure consultants to augment internal expertise for the design and engineering of water supply features, predatory protection, and raceway and related facilities work and to conduct an EIA and prepare an EIR of supply alternatives. It will conduct public bidding and award construction contracts in accordance with state and federal guidelines and solicit quotes for appropriate insurance polices from recognized companies in this field.

As the treating of the water supply to Coleman is urgent, so it is also urgent that the Project is completed before anadromous fish access is expanded in Battle Creek. The Project has the support of the Battle Creek Watershed Conservancy, Tehama County Board of Supervisors, Tehama County Resources Conservation District, and the Western Shasta County Resource Conservation District. MLTF will continue to apprise these agencies of Project actions and seek their comments in the course of project execution.

Project Description

Proposed Scope of Work. The proposed Project addresses implementation aspects, within the BCRP, of the CALFED Strategic Plan Goals: No.1 Native species recovery and conservation; No.2 Rehabilitation and protection of natural processes; No.3 Maintain and enhance selected species for sustainable harvest and consumption; and No.4 Protect and restore major habitat types. The Project also is fully consistent with four of the 1999 Funding Priorities.

The Project responds directly to meeting the CALFED policy to protect economic activities in the watersheds from potentially adverse impacts of restoration actions. In parallel, the Project will address BCRP issues inherent in seeking to attain the Goal of the Battle Creek Watershed Conservancy: To preserve the environmental and economic resources of the Battle Creek watershed through responsible stewardship, liaison, cooperation, and education.

The objectives of the CALFED BCRP are to help attain the Strategic Plan Goals, with specific emphasis on the four Goals cited in the above paragraph. A BCRP primary object is to expand spawning areas and provide greater access to cool water holding pools in the upper stream channels for the winter-run chinook and steelhead. BCRP actions include new conveyances associated with the hydro facilities to preclude blending waters of the North and South Forks of Battle Creek and removal of selected diversion structures and provision of effective fish ladders at the remaining diversion structures. Unfortunately, these salmon carry IHNV, BKD, Ceratomyxa shasta, and Myxobolus cerebralis, degrading the water quality of Battle Creek. The introduction of these pathogens into MLTF facilities would devastate the enterprise. Nevertheless, BCRP does not recognize any need or obligation to address the serious situation confronting MLTF by BCRP actions.

The extended period with obstructions in the channel had eliminated significant populations of salmon and the associated pathogens in the upper Battle Creek watershed. The problem, however, remained serious in the lower reaches. The document, Battle Creek Salmon and Steelhead Restoration Plan (January 1999), describes its history. The recognized importance of the pathogen problems is evident in the statements and citations found in several passages in the report. Pathogen management measures dictated the manner of operation of the Coleman and predecessor hatcheries. Major expenditures were made to seek remedy, but with mixed success. Recently, an ozone treatment unit was installed to kill the serious pathogens in a portion of the supply to Coleman. The recent and current CALFED budgets are funding the cost of expanding the Coleman treatment capacity to meet its maximum water supply needs, replacing the fish ladder and altering hatchery operations.

The January 1999 BCRP report recommends additional measures, above those in recent budgets, to address the pathogen problems at the hatchery. These include:

Implement pipeline connections and dam removals to minimize the inflow of fish pathogens from salmon habitat to the CNFH's primary water supply on Coleman canal to provide redundant disease safety for water supply during times when the ozonation system is inoperative.

Monitor diseases in wild fish until the coordinated goals established by CALFED and CAMP are met.

Thus, the measures at Coleman Hatchery recently completed, those to be launched this year, and those to follow that deal with these pathogens confirm the situation. The potential problems are very serious and the remedies are major. The fundamental importance to the Restoration Program, the nature and solutions of the pathogen concerns and the urgency for implementing remedial measures has led CALFED to place top priority to funding protection of the Coleman Hatchery.

The situation confronting MLTF is even more complex than that which Coleman faces and its resolution of greater importance to the viability of its enterprise. Coleman has struggled for years, but it has greater leeway in meeting its objectives. MLTF not only faces more restrictive criteria, but also cannot secure funding from federal budgets to cover future difficulties as can Coleman. This situation also is of deep concern to the citizens in the local region.

MLTF established eight hatcheries within the upper Battle Creek watershed specifically because it was there that it could obtain cool pathogen-free water. These sites were isolated from one another and situated on independent sources. This would help limit possible disease outbreaks, but also insure operation during prolonged periods of drought. Though the hatcheries do not consume significant quantities of water, they still require a reliable through-flow of high quality water to sustain the operations.

The increased pathogen risk to MLTF stems from the increased number of diseased fish in the upper reaches and the closer proximity of these fish to several MLTF sites. The major vectors that may transmit the pathogens to the MLTF water supplies and facilities include many species of birds (wading birds and birds of prey) and animals such as mink, otter, and raccoon that feed on fish carcasses. Their population in the upper watershed will rapidly increase as feed increases. Even crawfish and newts, widely abundant in the area and proven carriers, will have greater exposure and in turn increase the risk in the MLTF water sources.

The incremental increase in pathogen risk to MLTF over that of the existing conditions is difficult to quantify. That there will be an increase cannot be disputed and is acknowledged by CDFG and UC Davis experts. Evaluating the worsening of quality and reliability of MLTF's supply can be likened to methods used by other industries. It is the risk of extremes, not averages that are important. Changing from a 1:50 year event to a 1:25 year event, a change from perhaps two to four percent, might seem minor at first. Yet, the results of these changes would be unacceptable to urban and industrial industries, even though the risk in question to them would not be an economically fatal risk as is confronting MLTF. Any increase in risk is of grave concern to this trout industry.

Projecting the rate of increase in pathogen exposure by the expanding runs is a subjective estimate too. There have been sudden and dramatic increases by over 100 percent in several salmon runs in the Sacramento in recent years. Some were attributed to major changes in fisheries management such as severe restrictions on ocean catch. Regardless of cause or involved runs, these incidents confirm that sudden extreme increases can and will occur. Indeed, an increase in both the number and proximity of pathogen-positive wild fish and in the vectors that feed and coexist with these fish will occur together. This will multiply the MLTF exposure at a rate even greater than just the rate of the anadromous fish population in the upper reaches.

A key resource of the firm is a proprietary strain of trout it has developed and improved since the late 1970s. This strain has characteristics of superior feed conversion, rate of weight gain, and body configuration that greatly improve production economics. This is reflected in the premium MLTF receives for its eggs, and in the efficiencies of its adult growout operations. However, the isolation of this strain in a disease-free environment during its evolution has greatly increased the susceptibility of the MLTF fish to nearby pathogens. MLTF customers depend on this strain. This makes it imperative that the scope and content of the Project comprises actions to maintain the pathogen-free environment, and that the Project provides insurance or equivalent legislative protection for covering any remaining risks of pathogen incidence under the conditions created by the BCRP. These technical factors frame the Project's scope of work.

There are non-technical factors that also influence the Project's scope of work and the reliability warranted in any proposed protective measures. The MLTF operation is a major contributor to the local economy, and with the increasing difficulties confronting the region's agriculture and constraints on the forest products industry, the economic health of this enterprise is becoming increasingly important. Indeed, aquaculture is of particular value to the entire state at this time. It produces much-needed products, utilizes few land resources, and

consumes only limited quantities of water, while providing sustained employment.

MLTF currently has gross revenues of \$3.4 million with 24 employees. It is one of the largest employers in the Battle Creek watershed with a total impact of about \$9.2 million upon the local and regional economies. This assumes a CALFED multiplier of 2.7, which may be conservative. The monthly lease payments to three ranchers on whose lands MLTF facilities are located aid them in realizing greater and more reliable incomes, thus helping maintain the economic viability of the basin's private agricultural holdings.

Thus, there are two objectives of the Project that frame the Scope of Work. This Project will help allow BCRP to proceed and attain the cited Strategic Plan Goals by protecting; (a) the MLTF operations from risks of the pathogens carried by the introduced anadromous salmonids and (b) the local economy from the potential economic impacts of the closure of MLTF due to pathogens.

The Project approach is to refine and implement measures judged practical and most effective to protect against pathogens. These measures include physical modifications to existing facilities and the construction of new features. The Project will include insurance to minimize uncertain impacts of disease or the equivalent through legislation and to protect incremental costs of new operations.

The Project tasks are interdependent. Should there be a temporary interruption of CALFED funding, the project may be divided into the ongoing Project Management and three implementation phases. Commencement of Phase I is a priority in order to maintain the BCRP schedule. The Project tasks are described in Figure 1. The Project Task Schedule and start / finish dates of tasks are shown in Figure 2.

Location and Geographic Boundaries of the Project. The Project work will be located in Tehama and Shasta Counties within the Battle Creek and Paynes Creek watersheds. The location of MLTF sites and their basic functions are identified on Map 1, which is a portion of the USGS Manton quad map.

FIGURE 1. PROJECT TASKS

PROJECT MANAGEMENT

Task 1 -- Manage Project, coordinate work with agencies, attend meetings and prepare quarterly, annual and completion reports.

PHASE - I

Task 2 - Conduct site visits and determine functions and capacity of features at each site and required modifications.

Task 3 -- Evaluate and select water supply protective measures, predator-proofing schemes, and the basic operational procedures.

Task 4 -- Conduct field investigations and prepare EIR

Task 5 -- Finalize details of equipment procurement and construction schedule

Task 6 -- Design water supply protective measures for each site.

Task 7 -- Design predatory proofing for each site.

Task 8 -- Design structural modifications in production facilities.

Task 9 -- Prepare estimates of equipment, construction, operations, maintenance, and risk insurance costs.

and risk insurance costs

Task 10 - Prepare equipment procurement and construction plans, specifications and bid documents.

PHASE - II

Task 11 -- Advertise, conduct bidding, and award contracts for equipment procurement and the construction of facilities.

Task 12 -- Administer contracts, conduct inspection, and oversee completion of contracted work.

Task 13 -- Procure / install equipment and execute construction contracts.

PHASE - III

Task 14 -- Request estimates of commercial insurance for the range of fish disease related risks to MLTF operations.

Task 15 -- Secure policy to protect MLTF.

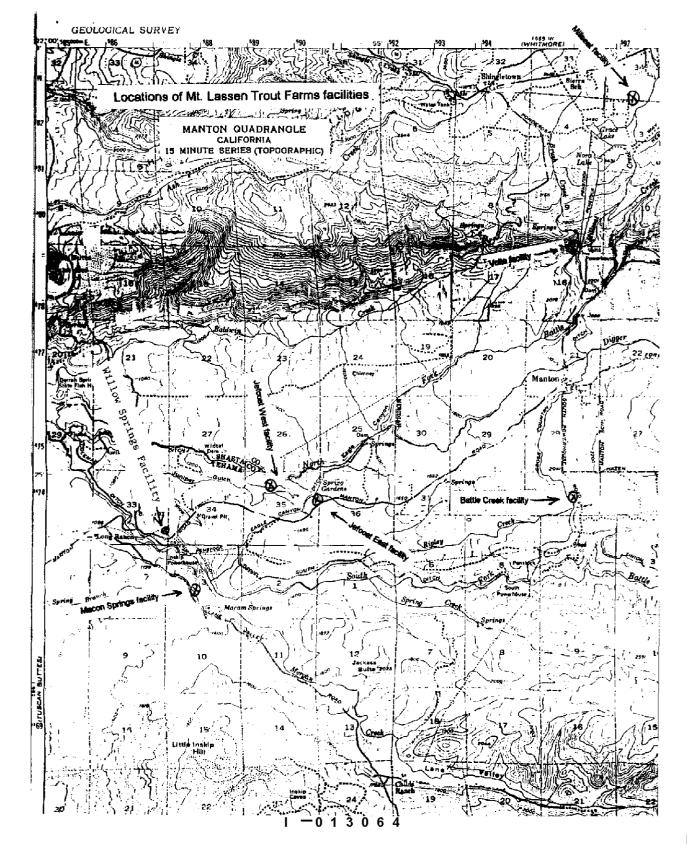
Task 16 -- Seek legislation providing government protection for pathogen disease

risks replacing commercial insurance.

Task 17 – Provide incremental operation and maintenance.

Task 18 – Monitoring.

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		Task 3 – Ev	aluate and	select water	r supply pr	otective me.	asures, prev	dator-proofi	ing scheme:	s, and the bi	asic operat	ional proced	Jures	
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Ecological/Biological Benefits

Ecological/Biological Objectives. The fundamental ecological/biological objectives of the Project are to permit the Battle Creek Restoration goals and objectives to be met. The involved restoration actions can only proceed if they comply with the policies and procedures stipulated by CALFED; (a) Be equitable in solving problems in all problem areas, (b) Be affordable to implement and sustain within the foreseeable resources of the Program and the stakeholders and (c) Have no significant negative impacts redirected to other regions. Policy (c) is embodied in the goal of the Battle Creek Conservancy supported by CALFED and reflected in the Battle Creek Watershed Community Strategy.

Additionally, the restoration actions must be in compliance with the mandate of CDFG to protect aquaculture from pathogens as enunciated in CDFG Code provision 15000 (2b).

The Project's overall objective is to create and maintain an environment that allows MLTF to sustain its operations. The primary benefits can be seen as the Battle Creek restoration itself. MTLF will maintain its present assets and its ongoing enterprise. The local economy and its many third parties will realize the secondary benefits to the extent that MLTF remains viable.

The scope of work describes how the Project constitutes an element of the greater ecosystem-based approach. The durability of the Project benefits rest on the effectiveness of the new and modified features at the MLTF facilities, with a protective economic umbrella provided to MLTF through risk insurance or its equivalent.

MLTF has compiled an extensive body of literature on which the technical characteristics are based. These include pathogen impacts, identified vectors and their behavior and means for limiting access of vectors to the facilities. The performance of Project features will be closely monitored and the scientific basis and hypothesis reflected in the configured Project features will be continuously examined and critically evaluated. Modifications will be made to MLTF facilities and operations within an adaptive management framework.

Linkages. The Project is intimately linked to the past, present, and proposed Battle Creek restoration efforts. The current status of the Project is far beyond the preliminary design stage. MLTF has monitored its operations and those of others where disease control or prevention has received major emphasis. In previous stages, the staff has visited and exchanged information with aquaculture operations throughout the USA, Europe, and Asia regarding this primary concern of all engaged in the fisheries sector. The President of MLTF, who has headed MLTF pathogen management and genetic programs since their inception, has participated in disease-related efforts with State and Federal agencies, industry associations, and professional groups. The firm has exchanged information with CDFG operators at its hatcheries and worked closely with the aquaculture specialists at the University of California at Davis.

The cited background and ongoing exchanges, coupled with MLTF records over a fifty year period, provide a solid basis for the formulation of this Project, the subsequent monitoring, and the incorporation of means to facilitate management adjustments if and when judged useful. The BCRP and the Project link to the North Sacramento Ecosystem Zone that in turn links to the Sacramento River Ecosystem Zone. Some of the most pertinent ERP objectives and targets for Battle Creek are cited. ERP strategic objective is to mobilize flows that, among other actions, allow upstream and downstream fish passage with a Battle Creek

Target 3 to increase flows 25 to 50 cfs (page 213); ERP strategic objective to improve freshwater fish habitat with Target 1 for all streams to maintain and improve existing freshwater fish habitat and essential fish habitat through integration of actions described for ecological processes, habitats, and stressor reduction or elimination (page 216); ERP strategic objective of eliminating or reducing stressors with Target I for Battle Creek to reduce or eliminate conflicts between the diversion of water and chinook salmon and steelhead populations at all diversion sites on Battle Creek (page 216).

There is another level where linkages and actions will influence the success of meeting ERP objectives. The Project results and related information will link directly to how CALFED may best formulate and fund future programs in other regions. In this regard, the Project strives to help attain the basic goals of the CALFED Bay-Delta Program and the associated statewide Ecosystem Restoration and Watershed Programs by devising suitable means to better accommodate local enterprises. This is particularly pertinent to those directly dependent on how the government agencies manage local fisheries and water resources.

Statewide, the Project directly links to efforts of CDFG to meet its legal mandate to protect aquaculture against pathogens; an activity important to CALFED's basic goals. Locally, the Project links to CALFED efforts to fulfill its obligation to maintain the economic health of the upper watersheds as proclaimed in its statement of governing policies and principles, as well as help remove uncertainty and doubt of the local public in the Battle Creek community.

System-Wide Ecosystem Benefits. The Project will produce system-wide ecosystem benefits through the mechanisms and implementation experience described in the previous section. The Project is one of the few that deals with the impacts on private sector operations in the field of aquaculture. Of more direct benefits, this Project deals with aquaculture operations that utilize the salmonid family where similar factors of disease, water quality, and supply reliability are faced. These concerns also confront the CALFED agencies, particularly state, and federal fisheries agencies.

The linkages and benefits are evident in earlier discussion and will not be repeated. However, the brevity of this section does not reflect the importance of the system-wide ecosystem benefits that will be derived from this Project.

Compatibility with Non-Ecosystem Objectives. The Project is fully compatible with CALFED's non-ecosystem objectives and creates no conflicts to their attainment. Indeed, the Project will make a major contribution to the non-ecosystem objective of retaining economic enterprise so desperately needed in the upper watershed areas. It will help maintain agricultural and similar land uses, reducing the trend to concentrated residential developments. The Project will allow MLTF to maintain its operations and the associated local employment and the very substantial direct and indirect contribution to the local economy of Tehama County and the Battle Creek Community. Again, this is a major Project benefit; important to meeting CALFED goals and providing a system-wide example of CALFED's support of economically viable and environmentally responsible agricultural use of private lands in the mountain watersheds.

Technical Feasibility and Timing

The urgency to attain the Project objectives; protecting MLTF against the consequences of BCRP, necessitates that this Project move forward in advance of the BCRP actions that will increase movement of fish to the upper reaches of Battle Creek. CDFG anticipate that this will occur in two to three years. The urgency of the Project's timing cannot be overstressed.

The Project is technically feasible and can be completed within the timeframe indicated in the Project Implementation Schedule. All Project component actions will utilize existing technology, equipment, materials, and construction practices. The remote location of some sites will influence costs though no unusual difficulties are anticipated. Experience with earlier construction of facilities at the respective sites confirms these views. The choice of water supply quality assurance measures will be based on least capital, operation, and maintenance costs of alternatives meeting the same criteria of reliability and effectiveness in pathogen exclusion.

The alternative to ozone / ultraviolet treatment to be examined utilizes an enclosed water supply collection system from the sources to the respective site facility. This may entail modifications and limited disturbances at some sites. The approach has been applied by the cities of Portola and Susanville as well as other towns and individuals. Nevertheless, some sites will require ozone / ultraviolet treatment of supply due to the dispersed nature of the water sources, and hence, the cost and complications of constructing water collection facilities.

An EIR will be prepared for sites where proposed work may have environmental impacts. Due to the nature and extent of the proposed work and the information generated by present operations, no difficulties in receiving clearances are anticipated for the supply alternatives.

Monitoring and Data Collection Methodology

Biological/Ecological Objectives The primary biological/ecological objectives of the Project are reflected in the results sought by the BCRP. The responsible CALFED unit or restoration program executing entity will monitor these.

The underlying biological/ecological objectives of the Project are the sustainable environment essential for the safe operation of the MLTF Project components. The success in meeting these objectives will be closely monitored as an element in the MLTF operation of the respective facilities. This is an essential part of MLTF operations quality assurance program. The monitoring program will also comply with existing state and federal regulations. MLTF currently submits water quality reports to the California Regional Water Resources Control Board. The monitoring and evaluation of data resulting from actions under this Project will be conducted in the course of facilities operations. Hence, results will be obtained as work proceeds at each facility site.

Monitoring Parameters and Data Collection Approach. The Project-related parameters to be monitored will include; (a) water quality of each facility supply, (b) presence of selected organisms within each facility -- water conveyance or holding features, (d) prevalence of predators at site, (e) success of predator proofing features, (f) performance, including operational reliability, of treatment and /or water supply collection equipment and (g) effectiveness of any modifications to the configuration and materials of individual features at each site.

The data will be included through an expansion of the operations monitoring program now in place for each facility.

Data Evaluation Approach. The data, which will be gathered during MLTF operations and during special situations as deemed useful, will be evaluated for its validity and analyzed using established methods. The long, thorough records of each site will provide a solid reference from the onset. The evaluations would include: (a) identify selected viruses and bacteria detected in the water samples, (b) determine the cause of any illness, (c) attempt to determine the implied time, source and means of entry of selected pathogens into a facility, (d) review the

related parameters cited above and basic operations information before and during the event, and (e) formulate corrective actions.

Consistent with adaptive management, MLTF will maintain a program to continuously review data collection and analysis methodology and procedures. This will incorporate results from implementing the corrective actions.

Local Involvement

MLTF has met with the ranchers from whom it leases sites and water use and has explained the situation, potential impacts on MLTF operations, and its options. The financial health of MLTF is of direct and immediate concern to these individuals and to their community. Though all are keenly aware of BCRP, they have become more knowledgeable on its potential impacts on MLTF and its operations and upon the local region. No landowners or their neighbors have expressed opposition or reservations concerning the Project: indeed, there is strong support. Letters of support and agreement with the Project from the landowners involved are attached.

Discussions also have been held with principle bodies of local government or their key officials. Again, the discussion focused on the restoration program, risks inherent in the program actions, and their potential direct impact on MLTF and indirect impact on the local and regional economy. These entities include:

Tehama County Board of Supervisors Battle Creek Watershed Conservancy Farmer groups

Extensive discussions have been held with the Battle Creek Conservancy including comments and suggestions for the formulation of the Battle Creek Watershed Community Strategy. All identified local officials and entities have expressed strong support for the Project. Formal letters of notification of the Projects have been sent to the appropriate local agencies, copies of which are attached.

CALFED's sponsorship of the Project and its measures to sustain MLTF will demonstrate to other regions of California how the CALFED program can coexist and sustain existing local enterprises. This will be key to support in areas where it will be implementing other components of the Bay-Delta Program. It will indicate how it sees its mandate to avoid redirecting problems from the Delta to the upper watersheds.

Cost

Budget MLTF has prepared the Project Budget based on MLTF experience and construction and operation and maintenance information from several sources. A more refined budget estimate for Task 12, Construction, will be prepared under Task 9, Cost Estimates once the configuration of all features are finalized. The total budgeted costs requested of CALFED for each task described in the Scope of Work, broken down as possible by category, are stated in Table 1. Table 2 displays CALFED budget by quarters during the first twelve quarters.

The capital costs reflect equipment and construction work. The cost estimate of the water supply protective measures is based on the ozonation / ultraviolet alternative as adopted for Coleman Hatchery. Every effort will be made to devise less costly approaches using a closed collection system as may prove possible at some sites. The predator proofing and modifications to raceways entail conventional measures and costs have been developed accordingly.

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The annual incremental increase in MLTF operation and maintenance costs of the modifications is present in the equivalent form of a present-worth lump sum. The annual insurance costs to protect against any remaining risks are also presented in the equivalent form of a present worth lump sum. The treatment of these two cost items and their calculation follows the methods used for determining CALFED BCRP compensation to PG&E electric power operations in the Battle Creek watershed. The MLTF overhead rate on direct staff compensation is 25%.

Schedule. As noted earlier, it is critical for the Project to successfully meet its objectives that the Project be funded so it may move forward well in advance of BCRP actions that will create the increased pathogen risk. The start / completion dates of each Task are noted in Figure 1 together with the anticipated percent completion during each quarter.

Cost Sharing

MLTF, at its cost, will prepare the functional design of the Project features pertaining to hatchery and production facilities and expanded predator proofing. The firm has developed the criteria and concepts during the last two years through review of external research and its extensive internal research and development programs.

MLTF, at its cost, will detail and implement the Project's monitoring and analysis program building upon its ongoing operations monitoring and quality control programs. It will incorporate information and techniques as secured from other sources.

The concept of adaptive management, which MLTF follows in its extensive operations, will be applied in an effective and timely manner.

All other Project costs are to borne by CALFED. Among these costs are; (a) project management, (b) evaluation of alternatives, (c) environmental assessments and impact reports, (d) engineering, preparation of documents and administration of construction contracts, (e) risk insurance and (f) the incremental increase in operation and maintenance costs necessitated by the pathogen risks.

Applicant's Qualifications and Assignment of Responsibilities

Assignment of Responsibilities. The Tasks entailed in completing the Project are described in the section, Proposed Scope of Work.

MLTF will be the Primary Contact and Project Manager responsible for the execution of the Project. Mr. Phil Mackey, President and CEO of MLTF, will have personal charge of the Project and be responsible for Task I. Mr.Dan Brown, MLTF's Operations Manager will serve as Deputy Project Manager, responsible for the supporting oversight of the Project work. Harald Frederiksen, Consulting engineer, will provide advice on broad program formulation and aspects of project management as requested by MLTF.

Mr. Mackey and other MLTF staff also will be responsible for <u>Task 2, 14, 15, 16</u> and 17.

The Consulting firm of Natural Resources Scientists, Inc. of Red Bluff will be responsible for <u>Task 4</u>, to conduct an EIS of the of the alternatives and prepare the Project EIR.

The Consulting firm of Judson Engineers, Inc. of Red Bluff, supported by specialists in ozone / ultra violet treatment will be retained to provide engineering

design and construction supervision services. MLTF and Judson Engineering jointly will complete <u>Task 2 and 3</u>. Judson Engineering will carry out <u>Tasks 5, 6</u>, 7, 8, 9, 10, 11 and 12.

A Contractor will be selected through competitive bidding to procure and install all equipment and complete all civil construction ñ the responsibilities under <u>Task</u> 13.

Applicant's Qualifications. MLTF is the premier private trout producer in California and a leader in the State's aquaculture industry. MTLF is one of the most sophisticated aquaculture enterprises in the US. Its genetic and nutritional programs, together with its constant advancement in operational processes are recognized throughout the industry.

Mr. Mackey has served as Member of the Board of Directors of the California Aquaculture Association, Member of the Board of Directors of the National Aquaculture Association and two terms as President of the U.S. Trout Farmers Association. In addition to other roles, Mr. Mackey has served on the Advisory Committee to CDFG on Disease Management and as Advisor to the US Department of Agriculture Sub-Committee on Aquaculture Related to Fish Health.

Mr. Brown recently completed a five-year term with USFWS as a general biologist and completed training in Modules I and II Midlevel Fisheries Management at Leetown WV Fisheries Academy.

Harald Frederiksen has worked over forty years in the field of water-related engineering and construction. In addition to heading a consulting firm, he has been program manager on major undertakings, headed design units' and provided construction oversight and inspection during employment with the California Department of Water Resources, consulting engineering firms and project implementation entities.

The environmental consulting firm of Natural Resources Scientists, Inc. was established in1992 and serves government and private clients in the field of water related environment assessment. It is well familiar with the CALFED Bay-Delta Program and the Battle Creek Restoration Program and has worked on assignments dealing with similar issues. The firm has conducted EIS on the creation and management of wetlands and related features. These will be the principle issues that may arise under the Project, depending on the alternative water supply scheme selected for the Project.

The consulting engineering firm of Judson Engineering, Inc. was established in 1986 and serves governments and private sector clients throughout the region in the fields of structures and water related facilities. It has provided ongoing engineering services to MLTF on new and modernization of existing facilities. The principals of the organization are familiar with MLTF operations and facilities pertinent to the Project and have dealt with similar engineering and construction problems for other clients. Specialists will be secured for the design and installation of ozone / ultraviolet water treatment units.

The Construction contractor will be selected by competitive bidding in accordance with procedures stipulated in the Proposal Solicitation Package.

In addition, MLTF has a policy to secure additional expertise whenever it encounters difficulties, needs to assess new approaches, or wishes to secure second opinions. MLTF will apply this policy to the execution of this Project.

Compliance with Standard Terms and Conditions

MLTF will comply with all applicable laws, regulations and rules, including the Standard Terms and Conditions stipulated in the Proposal Solicitation Package and complete the appropriate forms contained in Attachment D and E. Forms 19, 4206, and 4186 in Attachment D and all appropriate forms in Attachment E have been completed and are attached.

Copies of Forms 4021 Bidder's Bond or other Security and Proof of Contractor's License required of construction contractors will be furnished upon their receipt during the Bid Process, <u>Task 11</u>.

NONDISCRIMINATION COMPLIANCE STATEMENT

STD. 19 (REV. 3-95) FMC

COMPAN	YNAME								
	M+	Lassen	Trout	Farme	Inc.				
	, PIL-	Lassen	Tront	rarms,	THC.				

The company named above (hereinafter referred to as "prospective contractor") hereby certifies, unless specifically exempted, compliance with Government Code Section 12990 (a-f) and California Code of Regulations, Title 2, Division 4, Chapter 5 in matters relating to reporting requirements and the development, implementation and maintenance of a Nondiscrimination Program. Prospective contractor agrees not to unlawfully discriminate, harass or allow harassment against any employee or applicant for employment because of sex, race, color, ancestry, religious creed, national origin, disability (including HIV and AIDS), medical condition (cancer), age, marital status, denial of family and medical care leave and denial of pregnancy disability leave.

CERTIFICATION

I, the official named below, hereby swear that I am duly authorized to legally bind the prospective contractor to the above described certification. I am fully aware that this certification, executed on the date and in the county below, is made under penalty of perjury under the laws of the State of California.

April 15, 1999	EXECUTED IN THE COUNTY OF Te hama	
PROSPECTIVE CONTRACTOR'S SIGNATURE HUST Markey		
President, Mt. Lassen Trout Farm	ms, Inc.	

State of California The Resources Agency Department of Water Resources

(Notarial Seal)

Agreement	No	
Exhibit		

NONCOLLUSION AFFIDAVIT TO BE EXECUTED BY BIDDER AND SUBMITTED WITH BID FOR PUBLIC WORKS

STATE OF CALIFORNIA COUNTY OF))ss)
Philip Mackey	, being first duly sworn, deposes and
(name)	
says that he or she isPresident	of
4 ==	ition title)
Mt. Lassen Trout Farms, Inc.	he bidder)
,,	are viduoi,
behalf of, any undisclosed person, par or corporation: that the bid is genuin has not directly or indirectly induced sham bid, and has not directly or indir- with any bidder or anyone else to put in bidding; that the bidder has not in a agreement, communication, or confer- bidder or any other bidder, or to fix a price, or of that of any other bidder, or body awarding the contract of anyone statements contained in the bid are directly or indirectly, submitted his or contents thereof, or divulged informa- not pay, any fee to any corporation, par	at the bid is not made in the interest of, or on thership, company, association, organization, he and not collusive or sham; that the bidder or solicited any other bidder to put in a false eatly colluded, conspired, connived, or agreed in a sham bid, or that anyone shall refrain from my manner, directly or indirectly, sought by rence with anyone to fix the bid price of the my overhead, profit, or cost element of the bid or to secure any advantage against the public or interested in the proposed contract; that all true; and, further, that the bidder has not, ther bid price or any breakdown thereof, or the tion or data relative thereto, or paid, and will entership, company, association, organization, in agent thereof to effectuate a collusive or
DATED: <u>4-15-99</u> B	y Philo Machen
	(person signing for bidder)
SAMBARA AND MEMPINED Communion & 1134705 Number Philite — Confloring Showns County My Comm. Supera May & 2001	Subscribed and sworn to before me on -201 15,1999 Bufuld
	(Notary Publič)

1 -0 1 3 0 7 5

State of California	
The Resources Agency	
DEPARTMENT OF WATER RESOURCE	5

Agreement No.	
Exhibit	

STANDARD CLAUSES -SMALL BUSINESS PREFERENCE AND CONTRACTOR IDENTIFICATION NUMBER

NOTICE TO ALL BIDDERS:

Section 14835, et. seq. of the California Government Code requires that a five percent preference be given to bidders who qualify as a small business. The rules and regulations of this law, including the definition of a small business for the delivery of service, are contained in Title 2, California Code of Regulations, Section 1896, et. seq. A copy of the regulations is available upon request. Questions regarding the preference approval process should be directed to the Office of Small and Minority Business at (916) 322-5060. To claim the small business preference, you must submit a copy of your certification approval letter with your bid.

Are you claiming preference as a small business?



^{*}Attach a copy of your certification approval letter.

U.S. Department of the Interior

Certifications Regarding Debarment, Suspension and Other Responsibility Matters, Drug-Free Workplace Requirements and Lobbying

Persons signing this form should refer to the regulations referenced below for complete instructions:

Certification Regarding Debarment, Suspension, and Other Responsibility Matters - Primary Covered Transactions - The prospective primary participant further agrees by submitting this proposal that it will include the clause titled, "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion - Lower Tier Covered Transaction," provided by the department or agency entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions. See below for language to be used; use this form for certification and sign; or use Department of the Interior Form 1954 (Di-1954). (See Appendix A of Subpart D of 43 CFR Part 12.)

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion - Lower Tier Covered Transactions - (See Appendix B of Subpart D of 43 CFR Part 12.)

Certification Regarding Drug-Free Workplace Requirements - Alternate I. (Grantees Other Than Individuals) and Alternate II. (Grantees Who are Individuals) - (See Appendix C of Subpart D of 43 CFR Part 12)

Signature on this form provides for compliance with certification requirements under 43 CFR Parts 12 and 18. The certifications shall be treated as a material representation of fact upon which reliance will be placed when the Department of the Interior determines to award the covered transaction, grant, cooperative agreement or loan.

PART A: Certification Regarding Debarment, Suspension, and Other Responsibility Matters - Primary Covered Transactions

CHECK VIF THIS CERTIFICATION IS FOR A PRIMARY COVERED TRANSACTION AND IS APPLICABLE.

- (1) The prospective primary participant certifies to the best of its knowledge and belief, that it and its principals:
 - (a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
 - (b) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
 - (c) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (1)(b) of this certification; and
 - (d) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.
- (2) Where the prospective primary participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

PART B: Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion - Lower Tier Covered Transactions

CHECK IF THIS CERTIFICATION IS FOR A LOWER TIER COVERED TRANSACTION AND IS APPLICABLE

- (1) The prospective lower tier participant certifies, by submission of this proposal, that neither it not its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.
- (2) Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

09/0016 March 1995 (This form committation 09/953, OI 1994) 1, 1997 (1997) A and G. 1983:

PART C: Certification Regarding Drug-Free Workplace Requirements CHECK WE THIS CERTIFICATION IS FOR AN APPLICANT WHO IS NOT AN INDIVIDUAL. Alternate I. (Grantees Other Than Individuals) A. The grantee certifies that it will or continue to provide a drug-free workplace by: Publishing a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the grantee's workplace and specifying the actions that will be taken against employees for violation of such prohibition; Establishing an ongoing drug-free awareness program to inform employees about-The dangers of drug abuse in the workplace: The grantee's policy of maintaining a drug-free workplace; Any available drug counseling, rehabilitation, and employee assistance programs; and The penalties that may be imposed upon employees for drug abuse violations occurring in the workplace; Making it a requirement that each employee to be engaged in the performance of the grant be given a copy of the statement required by paragraph (a); (d) Notifying the employee in the statement required by paragraph (a) that, as a condition of employment under the grant, the employee will -Abide by the terms of the statement; and Notify the employer in writing of his or her conviction for a violation of a criminal drug statute occurring in the workplace no later than five calendar days after such conviction; Notifying the agency in writing, within ten calendar days after receiving notice under subparagraph (d)(2) from an employee or otherwise receiving actual notice of such conviction. Employers of convicted employees must provide notice, including position title, to every grant officer on whose grant activity the convicted employee was working, unless the Federal agency has designated a central point for the receipt of such notices. Notice shall include the identification numbers(s) of each affected grant: Taking one of the following actions, within 30 calendar days of receiving notice under subparagraph (d)(2), with respect to any employee who is so convicted --(1) Taking appropriate personnel action against such an employee, up to and including termination, consistent with the requirements of the Rehabilitation Act of 1973, as amended; or (2) Requiring such employee to participate satisfactorily in a drug abuse assistance or rehabilitation program. approved for such purposes by a Federal, State, or focal health, law enforcement, or other appropriate agency; Making a good faith effort to continue to maintain a drug-free workplace through implementation of paragraphs (a) (b), (c), (d), (e) and (f). B. The grantee may insert in the space provided below the site(s for the performance of work done in connection with the specific grant: Place of Performance (Street address, city, county, state, zip code). Check___if there are workplaces on file that are not identified here. PART D: Certification Regarding Drug-Free Workplace Requirements

CHECK__IF THIS CERTIFICATION IS FOR AN APPLICANT WHO IS AN INDIVIDUAL.

Alternate II. (Grantees Who Are Individuals)

- (a) The grantee certifies that, as a condition of the grant, he or she will not engage in the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance in conducting any activity with the grant;
- (5) If convicted of a criminal drug offense resulting from a violation occurring during the conduct of any grant activity, he or she will report the conviction, in writing, within 10 calendar days of the conviction, to the grant officer or other designee, unless the Federal agency designates a central point for the receipt of such notices. When notice is made to such a central point, it shall include the identification number(s) of each affected grant.

Standard Form 424 (Rev. 7-97) Prescribed by OMB Circular A-102

s. Date Signed 4-15-99

d. Signature of Authorized Representative

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Previous Edition Usable

Julio Machen

PART E: Certification Regarding Lobbying Certification for Contracts, Grants, Loans, and Cooperative Agreements

CHECK_ IF CERTIFICATION IS FOR THE AWARD OF ANY OF THE FOLLOWING AND THE AMOUNT EXCEEDS \$100,000. A FEDERAL GRANT OR COOPERATIVE AGREEMENT: SUBCONTRACT, OR SUBGRANT UNDER THE GRANT OR COOPERATIVE AGREEMENT.

CHECK IF CERTIFICATION IS FOR THE AWARD OF A FEDERAL LOAN EXCEEDING THE AMOUNT OF \$150,000, OR A SUBGRANT OR SUBCONTRACT EXCEEDING \$100,000, UNDER THE LOAN.

The undersigned certifies, to the best of his or her knowledge and belief, that:

- (1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, and officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- (2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
- (3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all liers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

As the authorized certifying official, I hereby certify that the above specified certifications are true.

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SIGNATURE OF AUTHORIZED CERTIFYING OFFICIAL Philip Mackey, President

- 11. Will comply, or has already complied, with the requirements of Titles II and III of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (P.L. 91-646) which provides for fair and equitable treatment of persons displaced or whose property is acquired as a result of Federal and federally assisted programs. These requirements apply to all interests in real property acquired for project purposes regardless of Federal participation in purchases.
- Will comply with the provisions of the Hatch Act (5 U.S.C. Secs. 1501-1508 and 7324-7328) which limit the political activities of employees whose principal employment activities are funded in whole or in part with Federal funds.
- 13. Will comply, as applicable, with the provisions of the Davis-Bacon Act (40 U.S.C. Secs. 276a to 276a - 7), the Copeland Act (40 U.S.C. Secs. 276c and 18 U.S.C. Sec. 874), the Contract Work Hours and Safety Standards Act (40 U.S.C. Secs. 327-333), regarding labor standards for federally assisted construction subagreements.
- 14. Will comply with flood insurance purchase requirements of Section 102(a) of the Flood Disaster Protection Act of 1973 (P.L. 93-234) which requires recipients in a special flood hazard area to participate in the program and to purchase flood insurance if the total cost of insurable construction and acquisition is \$10,000 or more.
- 15. Will comply with environmental standards which may be prescribed pursuant to the following: (a) institution of environmental quality control measures under the

- National Environmental Policy Act of 1969 (P.L. 91-190) and Executive Order (EO) 11514: (b) notification of violating facilities pursuant to EO 11738; (c) protection of wetlands pursuant to EO 11990; (d) evaluation of flood hazards in floodplains in accordance with EO 11988; (e) assurance of project consistency with the approved State management program developed under the Coastal Zone Management Act of 1972 (16 U.S.C. Secs. 1451 et seq.); (f) conformity of Federal actions to State (Clear Air) Implementation Plans under Section 176(c) of the Clear Air Act of 1955, as amended (42) U.S.C. Secs. 7401 et seq.); (g) protection of underground sources of drinking water under the Safe Drinking Water Act of 1974, as amended, (P.L. 93-523); and (h) protection of endangered species under the Endangered Species Act of 1973, as amended, (P.L. 93-205).
- Will comply with the Wild and Scenic Rivers Act of 1968 (16 U.S.C. Secs. 1271 et seq.) related to protecting components or potential components of the national wild and scenic rivers system.
- Will assist the awarding agency in assuring compliance with Section 106 of the National Historic Preservation Act of 1966, as amended (16 U.S.C. Sec. 470), EO 11593 (identification and preservation of historic properties), and the Archaeological and Historic Preservation Act of 1974 (16 U.S.C. 469a-1 et seq.).
- Will cause to be performed the required financial and compliance audits in accordance with the Single Audit Act of 1984.
- Will comply with all applicable requirements of all other Federal laws. Executive Orders, regulations and policies governing this program.

SIGNATURE OF AUTHORIZED CERTIFYING OFFICIAL	TITLE
Philip Maden	President
APPLICANT ORGANIZATON Mt. Lassen Trout Farms, Inc.	DATE SUBMITTED April 15, 1999

SF 424D (Rev. 4/92) Back

OMB Approval No. 0348-0041 **BUDGET INFORMATION -- Construction Programs** NOTE: Certain Federal assistance programs require additional computations to arrive at the Federal share of project costs eligible for participation. If such is the case you will be notified. b Costs Not Allowable c. Total Allowable Costs COST CLASSIFICATION a. Total Cost for Participation (Column a-b) 89.250 Administrative and legal expenses 2 89,250 Land, structures, rights-of-way, appraisals, etc. 0 ٥ Relocation expenses and payments 0 0 Architectural and engineering fees 130,000 130,000 Other architectural and engineering fees 9,500 9,500 Project inspection fees Included in 4 Included in 4 Site work Included in 9 Included in 9 Demolition and removal 0 9 Construction 1,726,100 1,726,000 10. Equipment Included in 9 Included in 9 11 Miscellaneous 1,641,930 1,641,930 12. SUBTOTAL 3,596,780 3,596,780 13. Contingencies 539,517 539,517 14. SUBTOTAL 4,136,297 4,136,297 15. Project (program) income 0 0 16. TOTAL PROJECT COSTS (subtract #15 from #14) 4.136.297 4,136,297 17. Federal assistance requested, calculate as follows: Enter eligible costs from line 16c Multiply X 100 % 4,136,297 (Consult Federal agency for Federal percentage share). Enter the resulting Federal share.

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Standard Form 424C (Rev. 4-92) Prescribed by OMB Circular A-102

The Battle Creek Watershed Conservancy

PO Box 606, Manton, CA 96059-0606

12 April 1999

Mr. Phil Mackey Mt. Lassen Trout Farm 28125 Highway 36E Red Bluff, CA 96080

Dear Mr. Mackey:

The Board of Directors of the Battle Creek Watershed Conservancy has directed me to express the support of the Conservancy for your CALFED proposal.

As you know, the goals of the Conservancy include "preserving the environmental and economic resources of the watershed." We believe that it is possible to pursue a balanced approach whereby environmental measures can actually enhance the economy of the local area, provided that the implications of environmental measures are properly evaluated and provided for.

As a participant in the Battle Creek Working Group for nearly two years, the Conservancy is well aware of the disease-transmission hazard faced by your hatchery operation when wild salmon and steelhead are given full access to Battle Creek. You brought this problem to the attention of the responsible agencies at an early date, and they have fully understood the problem and been quite sympathetic.

These risks are important not only to Mt. Lassen Trout but to the wider community. It is clear that community support for the restoration program depends partly upon the minimization of any negative impacts of the program upon the local economy, and Mt. Lassen Trout is a very significant industry in our watershed.

Please be assured that the Conservancy will continue to work with Mt. Lassen Trout to seek approval for appropriate remedial measures to protect your operation. We believe that your proposed efforts will complement the broader measures being proposed by the Conservancy in our separate proposal.

Sincerely,

Robert Lee

Secretary, Battle Creek Watershed Conservancy

Board of Supervisors COUNTY OF TEHAMA

District 1 - Barbara McJver District 2 - George Russell District 3 - Charles Willard District 4 - Ross Turner District 5 - Bill Borror



Richard Robinson Chief Administrator

From:

Charles Willard

Tehama County Superviser

District # 3 PO Box 250

Red Bluff, CA 96080

To.

Mr. Lester Snow

CALFED Bay Delta Program

1416 Nineth Street Sacramento, CA 95814

Rc.

Mt. Lassen Trout Farm Inc. Proposal

Deat Mr. Snow

The CALFED programs to increase the populations of wild salmonids on Battle Creek are moving forward. An important part of the CALFED program is to avoid redirected impacts when selecting and approving program actions. One of the potential impacts of the increased populations of wild fish is the possible infection of hatchery fish with pathogens transmitted to the hatchery fish by the predators and association. Mt. Lassen Trout Farm Inc. has eight facilities that may be affected by this redirected action of increasing the wild populations.

Mt Lassen Trout Farm Inc. would be unable to market their product if the diseases were found in their facilities and would be subject to losing their product and future loss of sales in reaction to these diseases. They employ about 25 local citizens in an area of rural economic depression. While I certainly support the return of the salmonids to historic levels and the possibility of economic development associated with that, I feel that CALFED must look beyond the immediate goal and ensure that the impacts of that program are not redirected to the detriment of our local citizens.

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Therefore, I am supporting the proposal of Mr Lassen Trout to examine and prepare for these possible affects of increased wild populations with CALFED assistance. The protection of the current hatchery operations and the restoration of the wild fish populations are both in CALFED's interest and should be a part of the program without redirecting impacts

Thank you for providing an opportunity to comment on this historic process.

Charles Willard 530-4655

Sharon Bahr P.O. Box 497 Manton, Ca. 96059

4-12-99

Phil Mackey Mt. Lassen Trout Farms, Inc. 28125 Hwy. 36E. Red Bluff, Ca. 96080

Dear Phil,

As we discussed, I support your efforts to protect your Mt. Lassen Trout Farm operations on my property. The proposal to construct a means to treat the incoming water to your facility or provide an enclosed collection system together with some site work, as well as to predator-proof your facilities is acceptable to me.

I look forward to hearing of the success of your proposal, and hopefully, the acceptance of the Project.

Sincerely.

Sharon Bahr

Leland Davis 299 Beverly Ave. Red Bluff, Ca. 96080

4-12-99

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Sincerely,

Leland Davis

Cland Davis

Marion Jones 28021 Manton Rd. Paynes Creek, Ca. 96075

4-12-99

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Sincerely

Marion Jones



April 12, 1999

Tehama County Board of Supervisors PO Box 250 Red Bluff, Ca. 96080

Dear Board of Supervisors,

In accordance with CALFED instructions, this letter is to notify your agency that Mt. Lassen Trout Farm (MLTF) will submit a proposal to CALFED for a Project to help it attain the goals of the CALFED Bay - Delta Program. MLTF supports the Program, but will have to receive physical and financial protection from the potential consequences of the planned restoration actions in Battle Creek.

The MLTF Project is to protect its operations in the Battle Creek Restoration Program (BCRP). The nature of the pathogens, the severity of State regulations governing pathogen incidents in aquaculture and the susceptibility of the MLTF trout strain necessitate the provision of reliable preventive measures. These include advanced treatment of water supplies and predator-proofing at MLTF's eight separate facilities within the basin and insurance against any remaining risks.

A pathogen incident would force destruction of stock, and subsequently due to loss of worldwide and stateside customers from interrupted supply and the stigma of disease, would be economically ruinous to MLTF. Under the present BCRP, CALFED will protect PG&E by compensation it for its ongoing loss of revenues caused by the modification of its operations and generation facilities. Nevertheless, no similar protective actions or like measures are provided MLTF under the current BCRP.

MLTF will seek high priority to proceed this year so that protection is in place before spawning access is opened further under the BCRP - now scheduled for two years hence. This is critical for MLTF and to the larger community which currently benefits from MLTF's \$9.2 million contribution to the local and regional economy.

MLTF will keep you informed of progress with the proposal, and hopefully the Project.

Sincerely,



April 12, 1999

Tehama Planning Dept. 444 Oak St. Red Bluff, Ca. 96080

Dear Mr. Robson,

In accordance with CALFED instructions, this letter is to notify your agency that Mt. Lassen Trout Farm (MLTF) will submit a proposal to CALFED for a Project to help it attain the goals of the CALFED Bay - Delta Program. MLTF supports the Program, but will have to receive physical and financial protection from the potential consequences of the planned restoration actions in Battle Creek.

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April 12, 1999

Shasta County Board of Supervisors 1815 Yuba St. Suite 1 Redding, Ca. 96001

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Sincerely,



April 12, 1999

Shasta County Planning Dept. 1855 Placer St. Suite 200 Redding, Ca. 96001

Dear Mr. Mull,

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Sincerely,

Phil Mackey
Philip Mackey
President



April 12, 1999

Delta Protection Commission PO Box 530 Walnut Grove, California 95690

Dear Commission,

In accordance with CALFED instructions, this letter is to notify your agency that Mt. Lassen Trout Farm (MLTF) will submit a proposal to CALFED for a Project to help it attain the goals of the CALFED Bay - Delta Program. MLTF supports the Program, but will have to receive physical and financial protection from the potential consequences of the planned restoration actions in Battle Creek.

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Sincerely,

Philip Mackey President

Ship Morley



April 12, 1999

Bay Conservation and Development Commission 30 Van Ness Avenue Room 2011 San Francisco, California 94102

Dear Commission,

In accordance with CALFED instructions, this letter is to notify your agency that Mt. Lassen Trout Farm (MLTF) will submit a proposal to CALFED for a Project to help it attain the goals of the CALFED Bay - Delta Program. MLTF supports the Program, but will have to receive physical and financial protection from the potential consequences of the planned restoration actions in Battle Creek.

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